

Case No. 14-1518

**United States Court of Appeals
for the Federal Circuit**

IN RE SHANEOUR

Appellant.

On Appeal from the Patent Trial and Appeal Board,
Appeal No. 2011-013548, Seeking Reversal of the PTAB's February 20, 2014
Decision Regarding Application No. 11/764,995

CORRECTED APPELLANT'S BRIEF

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CERTIFICATE OF INTEREST

Counsel for the APPELLANT, Dwight C. Shaneour. certifies:

1. The full name of every party or amicus represented by me are:

Dwight C. Shaneour
Qualite Lighting, Inc.

2. The names of the real parties in interest represented by me are:

Qualite Lighting, Inc.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the parties represented by me are:

The Shane Group, LLC

4. The names of all law firms, partners or associates that appeared for the parties represented by me in the trial court or expected to appear in this court:

Young Basile Hanlon & MacFarlane P.C. – Thomas N. Young

August 1, 2014
Date

/s/Thomas N. Young
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STATEMENT OF RELATED CASES

None.

JURISDICTIONAL STATEMENT

The Court has jurisdiction under 35 USC § 141 and 28 USC § 1295(a)(4)(A), which provides that “[t]he United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction ... of an appeal from a decision of ... the Patent Trial and Appeal Board of the United States Patent and Trademark Office with respect to a patent application”.

STATEMENT OF THE ISSUES

1. Did the Examiner and the Patent Trial and Appeal Board fail to meet the *Graham v Deere* standard by incorrectly and incompletely construing the claims and the prior art in conducting the obviousness analysis; and
2. Is Miki, the principal reference used in the obviousness analysis, non-analogous art?

Appellant answers both questions “YES”

STATEMENT OF THE CASE

On December 10, 2010, after numerous Office Actions, the Examiner finally rejected all eleven pending claims under 35 USC § 103 on U. S. Patent No. 7,635,958 to Miki in view of U. S. Patent No. 6,960,892 to Loughrey. A 213-221; Miki @ A337-368; Loughrey @ A321-336. The Examiner based his obviousness conclusion on an analysis of Figs. 1, 6, and 7 of Miki, conceding that Miki did not disclose ballasted high intensity arc-discharge lights, a radio link, selectable gross lighting levels, and a remote command center. A218. He filled these gaps with the teachings of Loughrey. A218-219. On December 2, 2014, the Patent Trial and Appeal Board affirmed the final rejection, explicitly stating that the Examiner's claim construction and prior art analysis were both supported by a preponderance of the evidence, and that the Miki patent was, indeed, analogous art eligible for use in a § 103 rejection. A003-008; A014-120 (dup); A314-319 (dup). Appeal from this Decision was timely noticed on April 15, 2014. A021-022).

STATEMENT OF THE FACTS

1. The application on appeal, serial no. 11/764,995, was duly filed on June 19, 2007 with eight original claims. A032-048.
2. In August 7, 2009, the Examiner issued a first Office Action rejecting claims 1-8 under 35 USC § 103 as unpatentable over U. S. Publication No. 2005/0138142 to Crookham et al. A099-107. This rejection was later withdrawn.

3. On November 11, 2009, the Examiner issued another Office Action rejecting all claims in the application under 35 USC § 103 as obvious from the combination of U. S. Patent No. 4,712,167 to Gordin et al. and U. S. Patent No. 4,414,493 to Henrich. A134-139. This rejection was also later withdrawn.

4. Both the Crookham publication and the Gordin patent were in the field of athletic field lighting using arrays of high intensity discharge lamps. A102, A134.

5. On December 12, 2010, the Examiner finally rejected all eleven pending claims under 35 USC § 103 as unpatentable over the combination of U. S. Patent No. 7,635,958 to Miki and U. S. Patent No. 6,960,892 to Loughrey as evidence of obviousness. A213-221. The Examiner's rejection specifically cited Figs. 1, 6 and 7 of Miki and purported to tie, albeit erroneously, the components of those figures to the subject matter set forth in the claims except for the recitations of high intensity ballasted arc-discharged lamps, a radio link, nominal selectable output levels and a remote command center, discrepancies found by the Examiner in the secondary reference, Loughrey. A218-219.

6. Fig. 1 of Miki is a lighting system diagram showing three "lighting devices", 10a, 10b, and 10c with diverging outputs as well as "illumination sampling portions", 122x, 122y, and 122z to measure light conditions in "target" positions remote from the light sources and connected in feedback comparison

loops for adjustment purposes. A338. All samplers inherently receive blended light from all sources. The specification, col. 11, line 55 specifically states that the Miki lighting system of Fig. 1 is for the “interior of a room”. A354.

7. A flow chart found in Fig. 2 of the patent and referring to the system of Fig. 1, shows that methodology used in connection with the system of Fig. 1 involves initially setting all lights to a maximum value and then adjusting “all lighting devices in one single step. A339.

8. Fig. 6 of Miki is another system diagram showing three lighting devices but only two “sampling portions” 122x and 122y located to measure light at target positions. A343.

9. Fig. 7 of Miki, A344, shows another lighting system with three light sources, 10a, 10b, and 10c, and three remotely located “illumination sampling portions” 122x, 122y, and 122z in what are uniformly referred to as “target positions”; spec., col. 2, ll. 9, 23 and 61, col. 3, line 40, col. 5, line 40, col. 6, line 22. A349, 350, 351.

10. The stated objective of the Miki systems is to make all *target position* lighting intensities conform to a desired level; see, for example, spec., col. 11, line 59. A354 and cites in fact No. 9 above.

11. The Examiner stated on page 3 of the Office Action that all of Miki's lights compose an "array" although the sources are not so illustrated nor is that term ever used in the patent. A215. He further states that each sensor (illumination sampling portion) provides a signal related to the light level being produced by a single lamp, a result which Miki does not allege and which is impossible to achieve in the Miki system. A216. He further states that "Miki discloses an athletic field lighting system", A217, an erroneous statement of material fact; Miki deals extensively and expressly with interior lighting except for one reference to "outdoors" at col. 1, l. 56. A349.

12. The PTAB issued a Decision on December 20, 2013 stating that the Examiner made a correct construction of the claims and a correct evaluation of the prior art in making his rejection under 35 USC § 103. Neither the Examiner nor the Board ever dealt explicitly or correctly with the issue of sensor location and the need for exclusivity of sensor output to a single fixture. A003-008, A014-020, A314-319.

13. The PTAB further affirmed the Examiner's finding that Miki was analogous art. A005. In its opinion, the Board's only use of the word "problem" is to say that Miki is "reasonably pertinent to the problem of lighting control systems for desired illumination of outdoor areas". A005. The Board does not otherwise

attempt to bring the Examiner's findings into harmony with *In re Arnold G. Klein*,
647 F.3d 1343, 98 USPQ 2d 1991 (Fed. Cir. 2011).

14. All of the lighting systems disclosed in Miki and described as “embodiments” in the detailed specification deal with interior lighting; there are no references to athletic field or anything remotely similar to athletic fields anywhere in the specification nor is there recognition of the problem associated with color differences between lights in outdoor lighting arrays. A337-368.

15. In all of the embodiments shown and described in Miki, the illumination sampling portions 122x, 122y, and 122z are located in target positions; i.e., *delivery* locations, where they inherently receive a blend of lights from all fixtures. A338, 343, 344. It is therefore impossible that the output of any illumination sampling portion could ever represent the light at the *point of origin* from a single fixture.

SUMMARY OF THE ARGUMENT

A. Standard of Review.

PTAB findings may be set aside if based on erroneous or insufficient evidence and the error is harmful. Error is indicated if a reasonable mind would find it erroneous and insufficient to support findings. The standard is less onerous

than “clearly erroneous”. *Dickinson v Zurko*, 527 US 150 (1999); *In re Watts*, 354 F.3d 1362 (Fed. Cir. 2004).

Obviousness is a legal question to be resolved on the facts; *In re Geiger*, 815 F.2d 686 (Fed. Cir. 1987).

B. Summary of Argument.

The Examiner’s and the Board’s incorrect claim construction and misevaluation of the art resulted in an obviousness analysis that does not conform to the *Graham v Deere* requirements; i.e., both fail to identify an important difference between the claimed invention and the prior art. A Section 103 rejection based on (a) a legally inadequate claim construction, and (b) a factually erroneous evaluation of prior art is inherently erroneous and prejudicial to Appellant.

The prior art used to support the rejection fails to recognize or solve a problem arising out of the occurrence of color differences, produced by lamp aging, between the light outputs of adjacent high intensity, arc-discharge lamps in closely-packed arrays of fixtures common to athletic field lighting systems. Appellant’s invention solves this problem by locating a photosensor for each fixture in an array where its output signal represents the light output of only one lamp, and using that signal to adjust the light output of the lamp to match that of its neighbors. Measuring light levels at “target” positions remote from several

fixtures with overlapping light outputs is not the equivalent of measuring and adjusting individual lamp output levels so that all lights in an array look the same.

Miki, the principal reference relied on by the Examiner and the Board to reject claims, does not recognize the problem of color non-uniformity between lamps in multi-fixture arrays and does not locate or use photosensors so as to produce signal outputs exclusively representing the light from an individual lamp. Instead, Miki *invariably* measures illumination levels in *target areas* remote from the fixtures using sensors that inherently receive blended light from multiple lamps.

In addition, Miki does not belong to the field of athletic field lighting using arrays of high intensity arc-discharge lamps, nor does Miki recognize or deal with the problem of color differences between adjacent lamps in an array. As such, Miki is non-analogous art, ineligible for use in the obviousness analysis.

The errors of fact committed by the Examiner and affirmed by the Board have injured Appellant in the denial of patent rights to a meritorious invention.

THE ARGUMENT IN CHIEF

The Invention

The invention belongs to the field of lighting systems for outdoor athletic fields where lighting is important to both the players and the spectators. A035,

036, 037. A characteristic of such systems is the assembly of lighting fixtures 16 in pole-mounted arrays (Fig. 1). A046. Each fixture 16a, 16b comprises a high intensity, arc-discharge lamp 20 mounted in a reflector which is aimed toward the playing field. A047.

According to the disclosure, as arc-discharge lamps age, their illumination output levels and colors change. A035, ¶0004. The invention eliminates these differences by measuring and adjusting the output of each individual lamp in an array at the points of origin. A036, 039, 040, ¶¶0006, 0019, 0020. No “target position” light measurements are made.

A control system (A047) including electronic ballasts 48, 50 is provided whereby an operator may first select between several levels of field lighting; e.g., a lower lighting level for practice, a mid-range lighting level for regular league play, and a higher lighting level for tournament play; A036, 037, ¶¶0007, 0011; Fig. 3, A048. This selection is usually made by an operator through an input device, such as a keyboard. A036, ¶0007.

The invention then automatically provides for finer adjustments between the operator-selected levels for the purpose of fine tuning the light output intensity and color of each fixture so that it matches that of its neighbors in a given array. A035, ¶0004.

To accurately achieve the fine adjustments when and if necessary, the invention places photosensors 42, 44 on each and every fixture; A036, ¶0007. Fig. 2, A047, shows these sensors 42, 44 mounted on the interior surface of the reflector associated with each arch-discharge lamp 20 so that the signal output from the photosensor is a function exclusively of the light output of that fixture; i.e., it is not affected by the light output of adjacent fixtures or, for that matter, by light levels on the field. The outputs of the sensors for off-color lamps are used in feedback loops as inputs to comparators 48 (A039, 040, Fig. 2, A047) to produce an error signal which is applied to the electronic ballast associated with an individual fixture to adjust its output to equal that of its correctly functioning neighbors. A036, 038, 039, 040, ¶¶ 0008, 0020, 0022. Target position; i.e., field lighting levels are not measured.

GLOSSARY OF TERMS

The following terms are used in the specification and claims.

Fixture	A combination of a high intensity arc-discharge lamp 20 and a reflector 16a. A036
Array	A “cluster” of fixtures mounted in close proximity to one another and attached to a pole. A036
Activity area	A wide area outdoor sport facility or “field”. A036 (¶0007)
Light level sensor	Photosensor responsive to incident light to produce an electronic signal. A038
Command center	A place where the overall light output level of an athletic field lighting system can be selected by an operator. A036, 038
Intensity	Light output level, as distinguished from beam width. A038
Color	A function of intensity; affected by aging. A035

CLAIMS ON APPEAL; A261-264

Independent claim 1 closely parallels the invention as described above; i.e., it calls for at least one “array” of lighting fixtures associated with an activity area such as an athletic field wherein the fixtures contain high intensity, electronically switchable ballasted lamps. A261. More specifically, claim 1 calls for “a plurality of light level sensors equal in number to the number of fixtures in the array *wherein each sensor is associated with an individual fixture and capable of producing a signal related to the light level being produced at any given time by the lamp in said fixture*”. *Id.* If there is any ambiguity in that element, it is surely resolved by the further language calling for “a logic system associated with the array and connected to receive *individual fixture light output signals from said sensors* and operative to adjust the output from the individual lamps in small increments to achieve substantially uniform lighting from all of the fixtures in the array”. *Id.*

In short, the recitations of (a) a plurality of light level sensors equal in number to the number of fixtures in an array, (b) the association of each sensor with an individual fixture, and (c) a logic system connected to receive individual fixture light outputs from the sensors can mean nothing other than the fact that a sensor output is exclusively representative of the light output of an individual lamp/fixture. This is the only reasonable interpretation of claim 1 consistent with

the specification. None of this language is consistent with locating photosensors in a “target” area remote from the fixtures so that they receive blended light from multiple fixtures.

Claim 7 is similar to claim 1 in overall content but calls for “a plurality of lighting fixtures arranged in clusters around an athletic field to direct light onto the field”. A262. Every cluster comprises “a plurality of fixtures containing high intensity ballasted arc-discharge lamps”. *Id.* Claim 7 further calls for “a plurality of multi-level output controls equal in number to the number of fixtures in the cluster wherein each output control is connected to *an individual fixture* for providing a relatively large number of closely spaced incremental lighting output levels”. *Id.*

Claim 7 further calls for “a plurality of light output level sensors equal in number to the number of fixtures in the cluster wherein each sensor is associated with an individual fixture for producing a signal related to the light output level by the lamp in the fixture”. *Id.* Finally, claim 7 calls for “a plurality of logic systems” with circuitry responsive to “individual fixture signals to said sensors” for adjusting the individual fixture intensity by way of the electronic ballasts to eliminate small differences in light output (and inherently, color) between adjacent fixtures in the cluster. A263.

Again, claim 7 can only be reasonably interpreted to say that each photosensor is so closely associated with an individual high intensity arc-discharge lamp as to produce signals representing only the output of that lamp such that the logic systems knows exactly how much and in which direction to adjust the light output to match that of its properly functioning neighbors. There is no way claim 7 can reasonably be interpreted to say that light output sensors, albeit equal in number to the number of fixtures in an array, can be arbitrarily located in remote target locations where they receive blended light from multiple fixtures.

Claim 9 calls for an athletic field lighting system including at least one array of lighting fixtures aimed at the field, each fixture comprising an arc-discharge lamp, a command center for turning the entire array of fixtures on and off and selecting nominal illumination levels, and a “fine level adjustment circuit *for each of said fixtures in said array*” wherein each circuit includes a photosensor “for producing an *individual fixture output signal* and a comparison circuit for producing an error signal”. A263.

Again, claim 9 follows the pattern set forth above with respect to photosensor/lamp relationship, but adds both the rough output level selection center to the fine level adjustment circuits. Here, the photosensors are capable of producing “an individual fixture output signal” connected into a comparison circuit.

Miki's photosensors which are arbitrarily located in a target area across the hall from the lighting fixtures cannot possibly respond to Appellant's claims when reasonably construed. A344, for example.

Claim 10 parallels claim 9 in calling for an athletic field lighting system with multiple arrays of high intensity ballasted lighting fixtures, a first system for selecting between rough or widely-spaced output levels and a second system for adjusting the outputs of individual fixtures in the arrays in small increments "so that all fixtures in an array produce substantially the same illumination". A263. A reasonable construction of claim 10 is to the effect that the "second system" must be capable of balancing *individual* arc lamp output levels to match those of its neighbors.

PROSECUTION HISTORY IN BRIEF

In the first Office Action on the merits, the eight original claims were rejected under 35 USC § 103 on the U. S. Publication No. 2005/0138142 to Crookham. A099, 102. Although the Examiner acknowledged that Crookham was not anticipatory of any complete claim, he cited no secondary reference cited as evidence that it would be obvious to modify the Crookham system to meet the claims. A102. Instead, he effectively took Official Notice to find that it would have been obvious to a person of ordinary skill in the art to substitute light level sensors for the environmental sensors of Crookham to achieve Appellant's claimed

objectives. A102. Contrary to established law, the Examiner simply relied on his own judgment to find the claimed invention obvious at the exact point of asserted novelty, a clear violation of the rule in *Ex parte Cady*, 148 USPQ 162, (PTO Bd. App. 1965). To his credit, however, the Examiner did recognize the need to rely on art from the field of athletic field lighting.

In a second Office Action dated November 11, 2009, A132-139, the Examiner withdrew the rejection based on Crookham and made an entirely new rejection based on the combination of U. S. Patent No. 4,712,167 to Gordin et al. and U. S. Patent No. 4,414,493 to Henrich. A134. Here, the Examiner creatively drew a conclusion of equality between light output intensity and beam width. This rejection, too, was challenged and ultimately withdrawn.

The final rejection, the rejection giving rise to this appeal, was based on 35 USC § 103 wherein the principal reference is U. S. Patent No. 7,635,958 to Miki, Figs. 1, 6, and 7, and the secondary reference, U. S. Patent No. 6,960,892 to Loughrey. A213-221.

In an After Final response, Appellant argued the point that Miki's elements 122x, y and z, were placed at arbitrarily selected remote "target" locations (on a hallway wall) relative to the fixtures where they were incapable of producing output signals representing individual lamp light output levels citing Miki, Col. 2, ll. 5-11. Appellant further argued that Miki was not in the field of high intensity

athletic field lighting systems and did not recognize the problem of color differences between adjacent fixtures in a multi-fixture array. Appellant argued that Miki was non-analogous art under the law as stated by this Court in *In re Arnold G. Klein*, 647 F.3d 1343, 98 USPQ 2d 1991 (Fed. Cir. 2011). A228-232.

The Examiner responded by expressing the opinion that a statement in the Miki specification at col. 2, ll. 5-11 to the effect that the sensors were not specific to individual fixtures must have been a reference to some embodiment other than the ones he relied on. A219. No further explanation was given.

The Board affirmed the Examiner's erroneous findings as to both claim construction and prior art, and expressly rejected Appellant's contention that Miki was non-analogous art, stating that "a preponderance of the evidence supports the Examiner's position that Miki is analogous prior art". A005.

In response to Appellant's argument that Miki does not disclose photosensors producing outputs exclusively representing individual fixture light outputs, the Board blithely stated that Appellant's arguments "lack persuasive merit, because the Examiner has explicitly and reasonably construed the claimed features of the sensor or photosensor ... and command center ... to corresponding elements known in Fig. 7 of Miki".

THE BOARD'S ERRORS

Both Examiner and the Board have misconstrued all of the claims in such a way as to virtually eliminate the limitation that sensor output represents only one lamp. Thus, both Examiner and Board failed to identify *all* of the clear differences between the claimed subject matter and Miki; as they were required to do. Both Examiner and the Board missed entirely the fact that the samplers 122x, y, and z could not possibly produce signals representing the output of only one lamp. These sensors are located such that they respond to blended illumination from multiple fixtures; they measure illumination *on arrival*, not *on departure*. In addition, Both the Examiner and the Board simply glossed over the facts that Miki is an interior lighting system for hallways or conference rooms (Miki, col. 1, ll. 13-25) and the spacing between the lamps in the embodiment of Fig. 7 is not consistent with that of an “array” as that term is used in Appellant’s disclosure. One word, “outdoors” in Miki does not equate to athletic field lighting as the Examiner erroneously concluded. The “sampling portions” 122x, 122y, and 122z are remotely located at arbitrarily selected positions where they inherently receive blended light from multiple light sources. Miki is concerned only with *target* lighting levels, a concern that has no relation to color differences between lamps in an array. Accordingly, the Examiner and the Board failed to follow the law of

Graham v Deere and *In re Arnold G. Klein* in judging the obviousness of the claimed invention. *They got the facts wrong!*

DETAILED ANALYSIS OF THE PRIOR ART

1. The Examiner and the Board have Misconstrued the Claims; AND Failed to Accurately Identify the Scope and Content of the Prior Art and the Differences between the Art and the Claimed Invention.

The differences between the claimed invention and the prior art must be correctly identified to bring the obviousness analysis into proper focus. *Graham v John Deere Co.*, 383 US 1 (1966); *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714 (Fed. Cir. 1991).

Every claim on appeal recites a system for making fine adjustments, as necessary, in the light output of individual lamps in a multiple lamp, high intensity athletic field lighting array by generating sensor signals representing the outputs of individual lamps in an array at the points of origin. No claim reads on a system using sensors to produce signals representing light levels at delivery locations; i.e., targets, from multiple lamps/fixtures. The output of a photosensor contains “intelligence” and, according to Appellant’s invention, the intelligence represents the light output of only one fixture and one fixture alone. There is no reasonable construction of any claim on appeal that differs materially from this construction.

The most significant “evidence” involved in the obviousness analysis is U.S. Patent No. 7,635,958 to Miki and particularly Figs. 1, 6, and 7. A337-368.

Looking specifically at the Miki patent, Fig. 1 shows an interior lighting system with light sources 10a, 10b, and 10c with diverging outputs. “illumination sampling portions” 122x, 122y, and 122z are located remotely from the sources. Spec., col. 11, l. 55. Fig. 2 is a flowchart showing how the system of Fig. 1 works. It shows that “all lighting devices” are adjusted together.

Fig. 6, A343, is another lighting system with three light sources but only two sampling devices. Fig. 7, A344, is still another lighting system with three sources and three samplers, all across a hallway from the sources.

The specification of Miki explains that all illumination sampling occurs at “target” positions; col. 2, ll. 9, 23, 61; col. 3, l. 40; col. 5, l. 40, col. 6, l. 22. There is no description of an “array”, color differences, or sensor signals representing light from only one fixture. *In fact*, none of the Miki systems is physically capable of seeing anything other than blended light from multiple fixtures. The Examiner and the Board missed this entirely; a fatal flaw in the § 103 analysis.

In his analysis, the Examiner says incorrectly that Miki’s lights are in an “array” even though, as a matter of *fact*, that term is not found in Miki. He further says that a sensor in Miki produces a signal relevant to the light level being produced by “the lamp”. As a matter of technical fact, this is impossible.

In short, both Examiner and Board have *not* correctly construed the claims or correctly evaluated the prior art. This shows that that the Board Decision was

unsupported by substantial evidence and based on an incomplete and flawed analysis under *Graham v Deere*. The error would even meet a “clearly erroneous” standard. The entire description of the embodiment of Fig. 7 is found in a single paragraph in Col. 24 which reads as follows:

In the lighting control system in embodiment 7 shown in FIG. 7, the illumination comparing device 12 is provided with three illumination sampling portions 122x, 122y, and 122z. The illumination sampling portions 122x, 122y, and 122z are arranged on a *wall surface 13* on which the desired illumination is desired to be set, and the illumination information is sent to the judgment portion 123 inside the illumination comparing device 12, *which is in a distant position*. For example, this can be applied for illumination of painting artworks at a museum. In this way, it is preferable that the illumination sampling portion 122x, 122y, and 122z *are installed in positions where the desired illumination is desired to be set*. The illumination sampling portions 122x, 122y, and 122z and the illumination comparing device 12 may be connected by wireless communications.” A360.

It takes some serious work to expand this short, curiously worded paragraph into a “disclosure” which can be used to challenge the patentability of Appellant’s claims. Both the Examiner and the Board have rejected the proposition that one

can logically look to other portions of the overall Miki disclosure for intelligence that bears upon the interpretation of this short description of the embodiment of Fig. 7. The above disclosure itself says nothing about an array, says nothing about arc discharge lamps, says nothing about outdoor lighting (indeed, it refers only to the illumination of artworks in a hallway) and says nothing about dedicating photosensors to individual light sources. Contradicting its own position as well as that of the Examiner, the Board elevates Miki's embodiment of Fig. 7 to an athletic field lighting system by referring exclusively to the following statement in col. 1 of the Miki specification:

“An object of the present invention is to provide a lighting control system capable of setting the illumination of a predetermined position to a desired illumination using a plurality of lighting devices in places such as in a hall, in an ordinary room, and outdoors.” A349.

If we stick with this portion of the specification, we find that the illumination which comes from the light sources is “sampled illumination of an *arbitrary position* ...”. Col. 1, ll. 64-65, A349. The disclosure becomes even more obscure when one reads the near gibberish found in col. 2 between lines 18 and 55, undoubtedly the result of a low quality translation from the original Japanese. A349.

Indeed, Miki appears to have a totally different protocol as far as illumination systems are concerned, a protocol that has no relevance whatsoever to outdoor athletic field lighting systems. As described in col. 5 between lines 24 and 33, all of the lights in Miki's system are set to a maximum light intensity or a minimum light intensity capable of being generated by all of the lighting devices in a particular system. A351. The lights thereafter are adjusted together in ganged fashion to reach a "target illumination". *Id.* At col. 6 between lines 50 and 55, there are repeated references to "random" adjustments, a concept which is completely foreign to Appellant's claimed invention. *Id.*

There is nothing in the Loughrey patent to fill in the gap left by the Miki disclosure as described above; i.e., neither the Examiner nor the Board even begins to take the position that Loughrey discloses photosensors associated with individual arc discharge lamps in an outdoor lighting array coupled to feedback-type comparison circuits to individually adjust the light outputs and colors of fixtures to match those of its immediate neighbors. Accordingly, the combination of the two references is no more effective to meet the terms of the appealed claims than Miki alone. The rejection is based on a misappraisal/misconstruction of all of the patent claims and/or an expansion of the actual disclosure of the prior art in such a way as to give it more credit than it deserves.

2. Miki is Non-Analogous Art.^{*}

Appellant's patent specification and repeated arguments to the Examiner and the PTAB have stressed the importance of recognizing a problem which is unique to high intensity arc-discharge lamp arrays used in the lighting of athletic fields and the like; i.e., apparent differences in the light output and color of adjacent fixtures in a multi-fixture array. A255, 301. While these differences in color may have little or no effect on the playability on the field as far as sport participants is concerned, they are readily noticeable by spectators and constitute an undesirable distraction. The present invention as specifically claimed recognizes and cures that problem.

It is folly to pretend that Miki is in the field of high intensity arc-discharge lamp arrays used in athletic field lighting. The single word “outdoors” in the Miki disclosure, contrary to the Board’s position, does not suffice in this regard when the disclosure as a whole deals with interior lighting. There is, therefore, neither recognition of the small color difference problem in high intensity outdoor athletic field lighting arrays nor a solution according to the subject matter set forth in the eleven claims on appeal. Lacking both recognition of the problem and the

* The Notice of Appeal erroneously states that the non-analogous art issue pertains to Loughery when it should say Miki. This error was discussed with attorney Monica Lateef of the Solicitors Office before the briefing and she stated that the error was readily apparent to her and non-prejudicial. Appellant has, therefore, elected not to burden the Court with amendatory paperwork and requests the Court's indulgence as to this harmless error.

articulation of a solution, Miki does not qualify as analogous prior art, much less *pertinent* prior art and should not have been used in a rejection based on 35 USC § 103. The Examiner implicitly recognized the need to base §103 rejections on genuine athletic field lighting systems in at least the first two Office Actions as described above; i.e., citing both Crookham and Gordin et al. as primary references in § 103 rejections that were ultimately withdrawn. When those rejections were overcome by Appellant's arguments, the Examiner shifted his focus to intensity measurement and adjustment systems, but lost track of the need to stay within the art of spectator-type athletic field lighting systems. In short, the Examiner went from non-pertinent prior art in the correct field to non-analogous prior art in an unrelated field in an effort to chase down what Appellant continued to assert as patentable invention.

This Court has given unmistakably clear signals regarding the boundaries to be observed in the selection of prior art in § 103 rejections. Art is only eligible for use in a § 103 analysis if it is reasonably pertinent to the problem confronting the inventor. *Pentec, Inc. v Graphite Controls Corp.*, 776 F.2d 309 (Fed. Cir. 1985), *In re Bigio*, 381 F.3d 1320 (Fed. Cir. 2004). *In re Arnold G. Klein*, 647 F.3d 1343 (Fed. Cir. 2011). The Examiner's position and the Board's affirmation thereof are at variance with this law and the Board's decision should be reversed for this reason.

CONCLUSION AND STATEMENT OF RELIEF SOUGHT

Neither the Examiner nor the Board correctly construed any of the eleven claims on appeal to call for the measurement of single-fixture light at its point of origin rather than blended light at a point of delivery; i.e., a target location. That characteristic is unique to the claimed invention, is not found in the prior art, and clearly establishes patentability under both 35 USC § 102 and 103.

Both the Examiner and the Board have exaggerated and misconstrued the actual technical content of the Miki reference. Neither the Examiner nor the Board has produced a complete listing of the differences between Miki's embodiment of Figs. 1, 6 and 7 and the claimed invention. Identifying differences is an essential component of an obviousness analysis under *Graham v. John Deere Co.*, 383 U.S. 1 (1966) and virtually all cases emanating therefrom.

The secondary reference, Loughrey et al. does not fill in the gaps left by Miki when objectively and correctly appraised; i.e., Loughrey does not teach the co-location of photosensors with individual lamps in a high intensity discharge athletic field lighting array, much less any other mechanism whereby the individual sensors exclusively represent the light output of one, and only one, lamp in the array. Appellant requests that the Board's Decision be *reversed*.

Dated: August 5, 2014

Respectfully submitted,

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I hereby certify that on this 5th day of August, 2014, I electronically filed the foregoing using the Court's CM/ECF filing system, which will send notification of such filing to the attorneys of record in this matter. Two hard copies were also served, via First Class U.S. Mail to the following:

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